What is claimed is:

1. A method for synthesizing a nanostructured carbon material, comprising the steps of;

mixing and reacting one or more precursors for one or more polymeric carbon precursors in the presence of one or more transition metal salts, and one or more inorganic oxide materials in a solvent to form a polymeric carbon precursor - transition metal salt - inorganic oxide composite,

catalytically graphitizing said polymeric carbon precursor -transition metal salt - inorganic oxide composite by heat-treating under an inert gas atmosphere to form a nanostructured carbon material - transition metal - inorganic oxide composite,

removing the inorganic oxide material portion from said nanostructured carbon material - transition metal - inorganic oxide composite by using an etching reagent, and

completing the formation of said nanostructured carbon material by removing transition metal by treating said nanostructured carbon material - transition metal composite with an acid to produce a nanostructured carbon material having excellent crystallinity and large surface area.

2. The method of Claim 1, wherein said process of mixing and reacting one or more precursors for one or more polymeric carbon precursors in the presence of one or more transition metal salts and one or more inorganic oxide materials in a solvent to form a polymeric carbon precursor - transition metal salt - inorganic oxide composite is replaced with the process of simply mixing one or more polymeric carbon precursors, one or more transition metal salts, and one or more inorganic oxide materials in a solvent to form a polymeric carbon precursor -transition metal salt - inorganic oxide composite

3. The methods of Claim 1 and Claim 2, wherein said polymeric carbon precursors include typically resorcinol-formaldehyde–gel (RF-gel), phenol-formaldehyde-gel, phenol resin, melamine-formaldehyde-gel, poly(furfuryl alcohol), poly(acrylonitrile), sucrose, polypyrrole, polydivinylbenzene and petroleum pitch.

4. The method of Claim 1, wherein said metal salts include the metal salts composed of metal cations including typically iron[Fe], cobalt[Co], nickel[Ni], molybdenum[Mo], vanadium[V], yttrium[Y], zirconium[Zr], niobium[Nb], lithium[Li], magnesium[Mg], aluminum[Al], silicon[Si], potassium[K], calcium[Ca], titanium[Ti], chromium[Cr], manganese[Mn], copper[Cu], zinc[Zn], gallium[Ga], germanium[Ge], arsenic[As], indium[In], tin[Sn], antimony[Sb], lanthanum[La], hafnium[Hf], tantalum[Ta], tungsten[W] and anions including typically acetate[$CH_3COO^-$], acetylacetonate[$CH_3COCH=C(O^-)CH_3$], fluoride[$F^-$], chloride[$Cl^-$], bromide[$Br^-$], nitrate[$NO_3^-$], sulfate[$SO_4^{2-}$], phosphate [$PO_4^{3-}$], oxalate[$COO^-$], perchlorate[$ClO_4^-$] and alkoxides[$RO^-$], and also any one or more mixtures of any combinations of two or more said metal salts listed above are used.

5. The method of Claim 1, wherein said inorganic oxides include typically silica[$SiO_2$], alumina[$Al_2O_3$], titania[$TiO_2$], ceria[$CeO_2$], zirconia[$ZrO_2$], tin oxide[$SnO_2$] and yttria[$Y_2O_3$], and also any one or more mixtures of any combination of two or more said inorganic oxides listed above are used.

6. The method of Claim 1, wherein said polymeric carbon precursors are catalytically graphitized by heating under inert gas atmosphere at a temperature between 300 °C and 2500 °C.

7. The method of Claim 1, wherein said polymeric carbon precursors are catalytically graphitized by heating under an inert gas atmosphere for a time duration between 0.1 and 50 hours.

8. The method of Claim 1, wherein said etching reagents include typically hydrofluoric acid[HF], sodium hydroxide[NaOH], potassium hydroxide[KOH], magnesium hydroxide[$Mg(OH)_2$], calcium hydroxide[$Ca(OH)_2$] and lithium hydroxide[LiOH], and also any one or more mixtures of any combinations of two or more said etching reagents listed above are used.

9. The method of Claim 1, wherein said acid solutions include typically hydrochloric acid[HCl], nitric acid[$HNO_3$], sulfuric acid[$H_2SO_4$], hydrofluoric acid[HF], phosphoric acid[$H_3PO_4$] and acetic acid[$CH_3COOH$].

10. The method of Claim 1, wherein the molar ratio of said polymeric carbon precursor to said metal salt is in the range of 20:1 to 1:2.

11. The method of Claim 1, wherein the molar ratio of said polymeric carbon precursor to said inorganic oxide is in the range of 20:1 to 1:2.

12. A nanostructured carbon material, wherein the characteristics of said nanostructured carbon material is characterized by;

the X-ray diffraction graph of said nanostructured carbon material exhibits three peaks; strong (002), second (100), and third (004) peaks, and the measured crystallite size perpendicular to the basal plane

($L_c$) of said nanostructured carbon material is in the range of 2nm to 20 nm, and

the Raman spectroscopy data of said nanostructured carbon material exhibit a G-line (graphitic-line) at a wave number between 1550 $cm^{-1}$ and 1610 $cm^{-1}$, a D-line (disordered-line) at the wave number between 1325 $cm^{-1}$ and 1385 $cm^{-1}$, and the intensity ratio of D-line (disordered-line) to G-line (graphitic-line), $I_D/I_G$. is less than 1.0, and

the specific surface area measured by the BET method is at least 200 $m^2/g$.

13. A nanostructured carbon material, wherein the characteristics of said nanostructured material is characterized by;

the scanning electron microscope (SEM) images of said nanostructured carbon material exhibit the sphere-like particles with an average size in diameter ranging from 50 nm to 300 nm, and

the transmission electron microscope (TEM) images of said particles are composed of the graphitic nanocoil-shaped particles with an average thickness ranging from 2 nm to 20 nm.